

### III. REMARKS

1. Claims 1-2 and 5-7 are not unpatentable over Crisler et al. ("Crisler") (U.S. Patent No. 5,594,738) in view of Dent (U.S. Patent No. 5,757,787) under 35 U.S.C. §103(a).

Claim 1 recites allocating a greater number of time slots in each downlink TDMA frame than in each uplink TDMA frame. This is not disclosed by Crisler in view of Dent.

Crisler relies on a symmetric allocation of resources. FIG. 1 of Crisler illustrates a one-to-one correspondence of uplink time slots 108 to downlink time slots 110. In Crisler if "N" uplink time slots are allocated, "N" downlink time slots are allocated. (see e.g. Abstract). The Examiner is incorrect when he states that Crisler discloses "asymmetric TDMA time frames which contain asymmetric downlink and uplink traffic channels." Crisler is "symmetric" since the time slot allocator (101) allocates N uplink time slots and N downlink time slots (110). An N to N correspondence is a "symmetric" correspondence, and not an "asymmetric" correspondence as in Applicant's invention. Again, as noted previously, Crisler specifically recites there is always a corresponding downlink time slot for every allocated uplink time slot. (Col. 3, lines 40-50; Col. 9, lines 39-49). Clearly, this not only implies but particularly dictates that there is a "symmetric" N-N correspondence, and not an "asymmetric" allocation in Applicant's invention. Thus, Crisler cannot disclose or suggest this feature of Applicant's invention.

Dent does not overcome the deficiencies of Crisler. Dent relates to a terminal intending to serve as a so-called dual-mode terminal, i.e. a terminal which, in this case, is able to communicate both over the GSM and the satellite interface. The

difference between the satellite system and GSM is that the speech codec of the satellite system produces coded speech data at a smaller data rate than the GSM, to which problem Dent's proposed solution is to change the length of the TDMA frame from 8 time slots to, for example, 16, 24 or 32. Thus, the length of the frame changes but the allocation of the uplink/downlink is not affected by the solution, and Dent does not disclose allocation of more time slots in the downlink direction than in the uplink direction. What is disclosed is that the smaller quantity of data of the satellite system can be transferred in a manner that saves energy and resources to the dual-mode terminal by using the existing TDMA frame structure according to the GSM structure.

Although Dent talks about asymmetrical TDMA formats (Col. 1, lines 62-67), referring to U.S. Patent No. 08/179,954, a close reading of that patent reveals that it does not disclose or suggest an allocation of more timeslots in the downlink direction than in the uplink direction in uplink/downlink allocation. U.S. Patent No. 08/179,954 only describes a system in which the downlink is transferred by using a TDMA connection and the uplink is transferred by using an FDMA connection. This type of system is not TDMA-based asymmetric timeslot allocation and is not related to the present invention.

Thus, neither Crisler nor Dent disclose each feature of Applicant's invention as claimed., and, claims 1-2 and 5-7 should be allowable.

Furthermore, it is submitted that there is no motivation to combine Crisler and Dent as required for purposes of 35 U.S.C. §103(a). In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), there must be some suggestion or

motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or combine reference teachings. There must also be a reasonable expectation of success, and the reference(s), when combined, must teach or suggest all of the claim limitations. (See M.P.E.P. §2142). As noted above, Crisler in view of Dent does not disclose or suggest each feature of Applicants' invention as claimed.

Neither of the references provide the requisite suggestion or motivation to modify the references as proposed by the Examiner. The Examiner's proposition that Applicants' invention would be obvious as recited in the claims is not supported by the factual contents of Crisler and Dent. Dent is related to a dual-mode terminal and to the problem of combining two separate systems into an operational entity from the point of view of the terminal. Crisler relates to utilization of symmetrical time slots in a TDMA communication system. Even if Dent was combined with Crisler, the result would be a satellite-GSM dual mode terminal able to allocate in a GSM system symmetric timeslot resources 1+1, 2+2, 3+3, etc. and to modify in a satellite system the structure of the TDMA frame from 8 time slots to 16, 24 or 32. But still, the asymmetric resource allocation in TDMA frames according to the present invention would not be disclosed. Thus, neither Crisler nor Dent provides any teaching or suggestion for a combination. The reference itself and/or the knowledge generally available to one of skill in the art does not provide the requisite motivation or suggestion to modify the references as proposed for purposes of 35 U.S.C. §103(a). When "the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference". In re

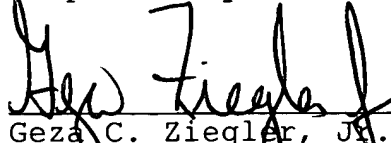
Rijckaert, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). The Examiner is requested to provide an indication as to where any such teaching, suggestion or motivation appears in the references. Absent such a teaching, it is submitted that a *prima facie* case of obviousness over Crisler and Dent under 35 U.S.C. §103(a) is not established.

2. Claims 3-4 and 8-10 are not unpatentable over Crisler in view of Dent and further in view of Galyas et al. ("Galyas") (U.S. Patent No. 6,205,157) under 35 U.S.C. §103(a). These claims should be allowable at least in view of their respective dependency on claims 1 and 6, respectively.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$420 is enclosed for a two-month extension of time. The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

  
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